



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,087	11/20/2000	Akira Ishida	PI01201-00009	7871

4372 7590 12/16/2005  
ARENT FOX PLLC  
1050 CONNECTICUT AVENUE, N.W.  
SUITE 400  
WASHINGTON, DC 20036

EXAMINER

IQBAL, KHAWAR

ART UNIT PAPER NUMBER

2686

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/715,087

Applicant(s)

ISHIDA, AKIRA

Examiner

Khawar Iqbal

Art Unit

2688

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11,12 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11,12 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 18-20 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11,12,15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akihiro et al (JP 09-284200), and further in view of Hamabe et al (US 6731949) and Wong et al (6233466).

3. Regarding **claims 15,17** Akihiro et al teaches a wireless base station that transmits a control signal to a non-specific mobile station by forming an omnidirectional antenna pattern and transmits a control signal to a specific mobile station by forming an array antenna pattern, the wireless base station comprising (figs. 1,3):

a judging unit for judging, when the control signal is to be transmitted to the specific mobile station, whether both of the following condition are satisfied: a difference between received reference signals in an immediately preceding reception from a mobile station is equal to or larger than a threshold value, and (para. 0020-0025,0038, 0043, 0066-0069); and

a controlling unit operable to, when the judging unit judges in the affirmative, stop the wireless base station from forming the array antenna pattern and force the wireless base station to transmit the control signal by forming an omnidirectional antenna pattern (para. 0020-0025, 0066-0069). Akihiro et al teaches field strength level is received,

Art Unit: 2688

when a base station 2 measures beforehand the sending-signal level (RSSI<sub>mes</sub>) of wireless terminal 11A (step S30) and call origination occurs (step S31). The level comparison with the threshold (RSSI<sub>th</sub>) established beforehand is performed (step S32), and it is a threshold RSSI<sub>th</sub>. If it becomes above, allocation processing of the Omni beam will be performed (step S33) (para. # 0038). Akihiro et al does not specifically teach in case where a reception field strength of the mobile station is high, control the wireless base station so that a transmission power is lowered temporarily.

In an analogous art, Hamabe et al teaches in case where a reception field strength of the mobile station is high, control the wireless base station so that a transmission power is lowered temporarily (for example, col. 4, lines 55-63, col. 6, lines 55-65, col. 7, lines 20-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Akihiro et al by specifically adding feature controlling transmission power in cellular mobile communication system in order to enhance control commands are formed for the base station to increase or decrease transmission power to a predetermined reference level as taught by Hamabe et al. Akihiro et al and Hamabe et al do not specifically teach a time lapse between the immediately preceding reception of the control signal exceeds a predetermined length.

In an analogous art, Wong et al teaches a time lapse between the immediately preceding reception of the control signal exceeds a predetermined length (col. 4, lines 2-25, col. 4, line 40-col. 5, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of

Art Unit: 2688

Akihiro et al and Hamabe et al by specifically adding feature controlling beams transmission in cellular mobile communication system in order to enhance control commands are formed for the base station to forming an array antenna pattern as taught by Wong et al.

Regarding **claim 11** Akihiro et al teaches wherein the control signal transmitted to the specific mobile station includes a message representing a link channel establishing request, a link channel establishing re-request, a link channel allocation request, or a link channel allocation rejection (para. 0020-0025, 0066-0069).

Regarding **claim 12** Akihiro et al teaches wherein when the judging unit judges in the negative, the controlling unit controls the wireless base station so that the transmission using the array antenna pattern is performed with a raised transmission power (para. 0020-0025, 0066-0069).

Regarding **claim 16** Akihiro et al teaches the judgment unit makes the judgment when a link channel establishing request is received in immediately preceding reception (para. 0020-0025,0038, 0066-0069).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 11,12,15-17 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's arguments filed 10/20/2005 have been fully considered but they are not persuasive, rejection for originally presented claims 11,12,15-17 is maintained.

Newly submitted claims 18-20 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The remaining claims are not readable on the elected invention because the invention of claims 18-20 is directed to is a calculating unit for calculating a weight coefficient for the control signal requesting channel allocation information received by each of the plurality of antennas, a combining unit for combining the control signal requesting channel allocation information received by each of the plurality of antennas and the calculated weight coefficient in order to form an array antenna pattern. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-20 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

6. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2688

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Khawar Iqbal whose telephone number is (571) 272-7909.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Application/Control Number: 09/715,087

Page 7

Art Unit: 2688

*Khawar Iqbal*

*Marsha D. Banks-Harold*  
MARSHA D. BANKS-HAROLD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600